

0049450.000700

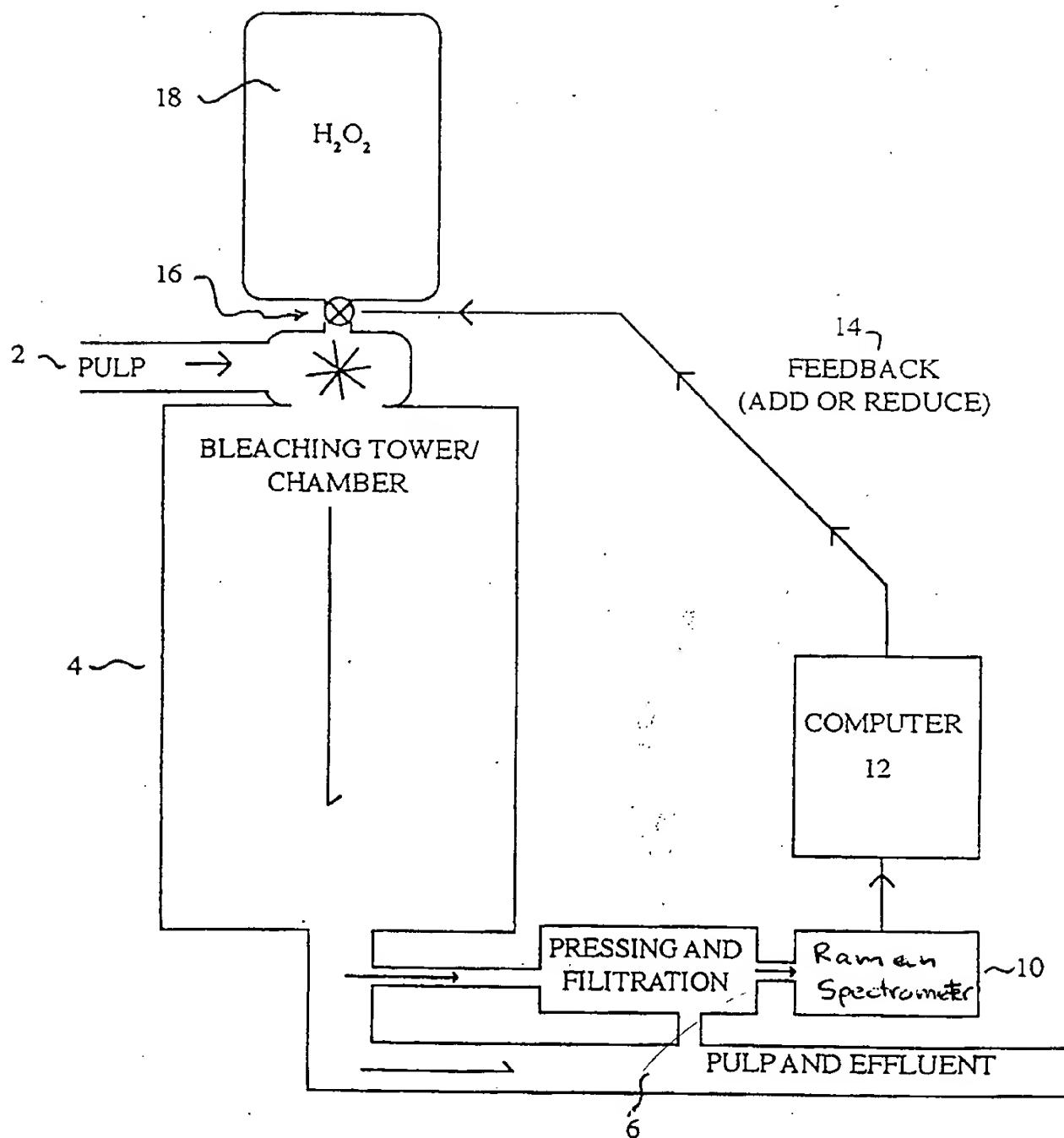


Figure 1.

00/020" 05466460

Matrix Plot

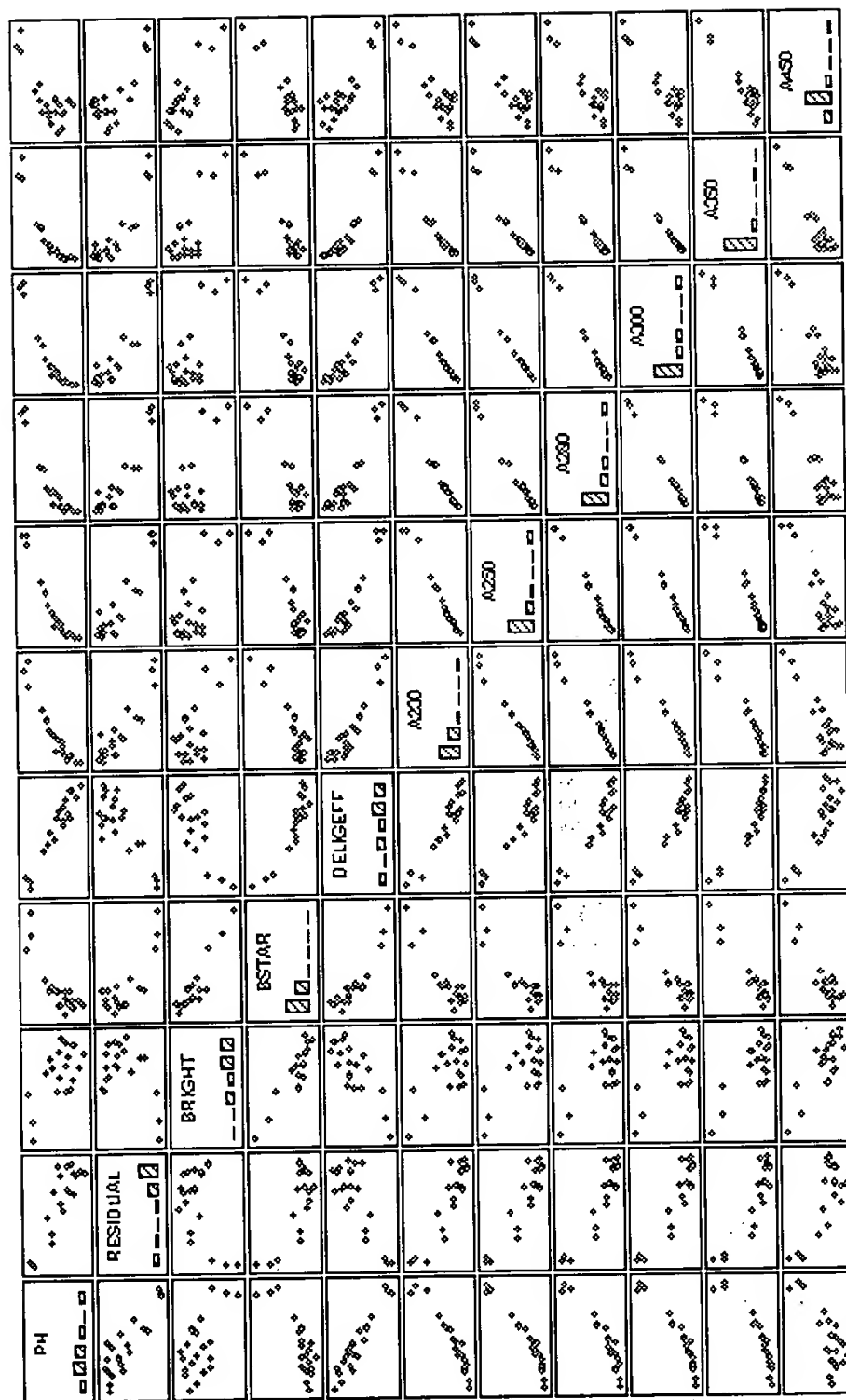


Figure 2

004020" 0546460

Matrix Plot

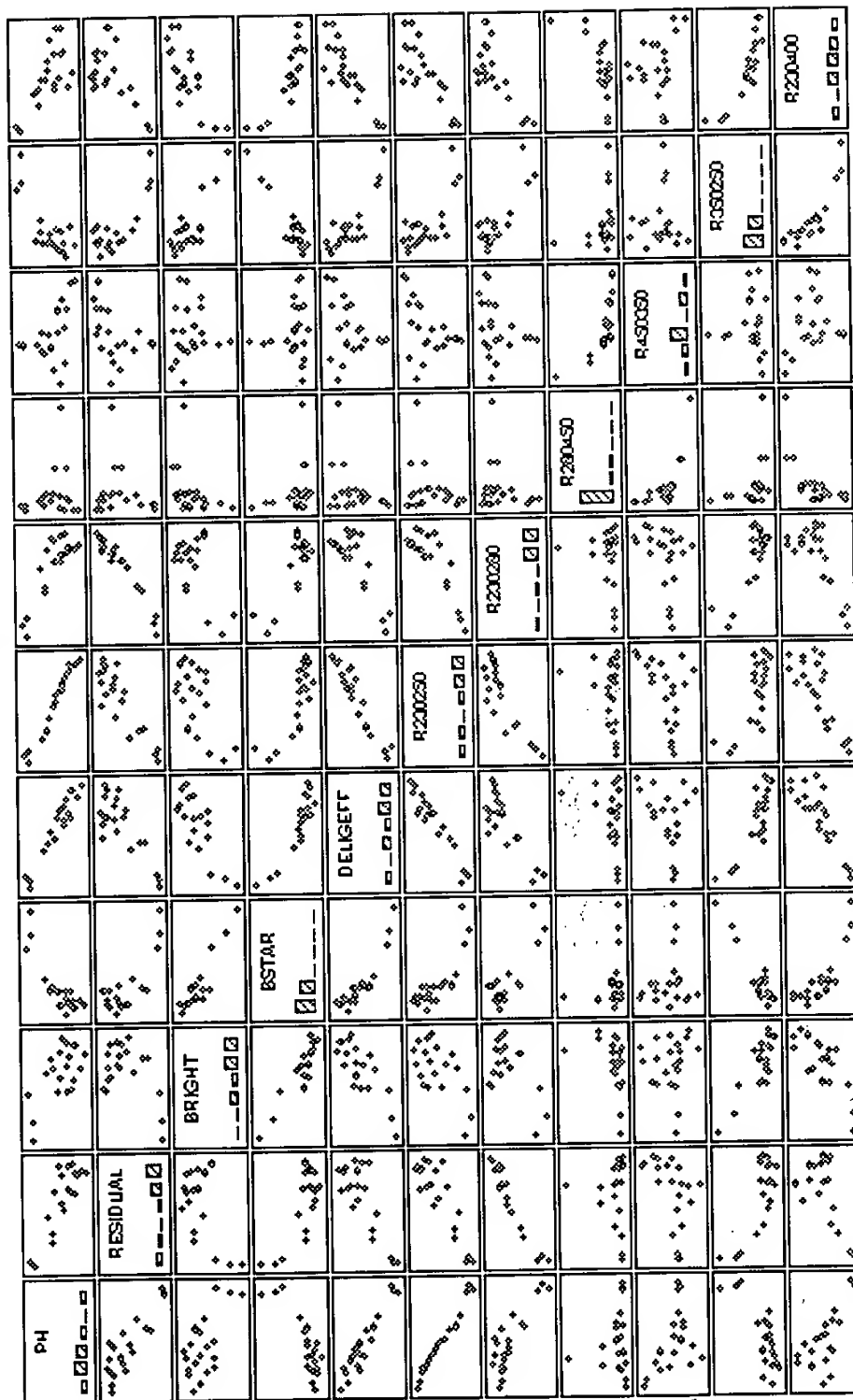


Figure 3

00/020" 05466460

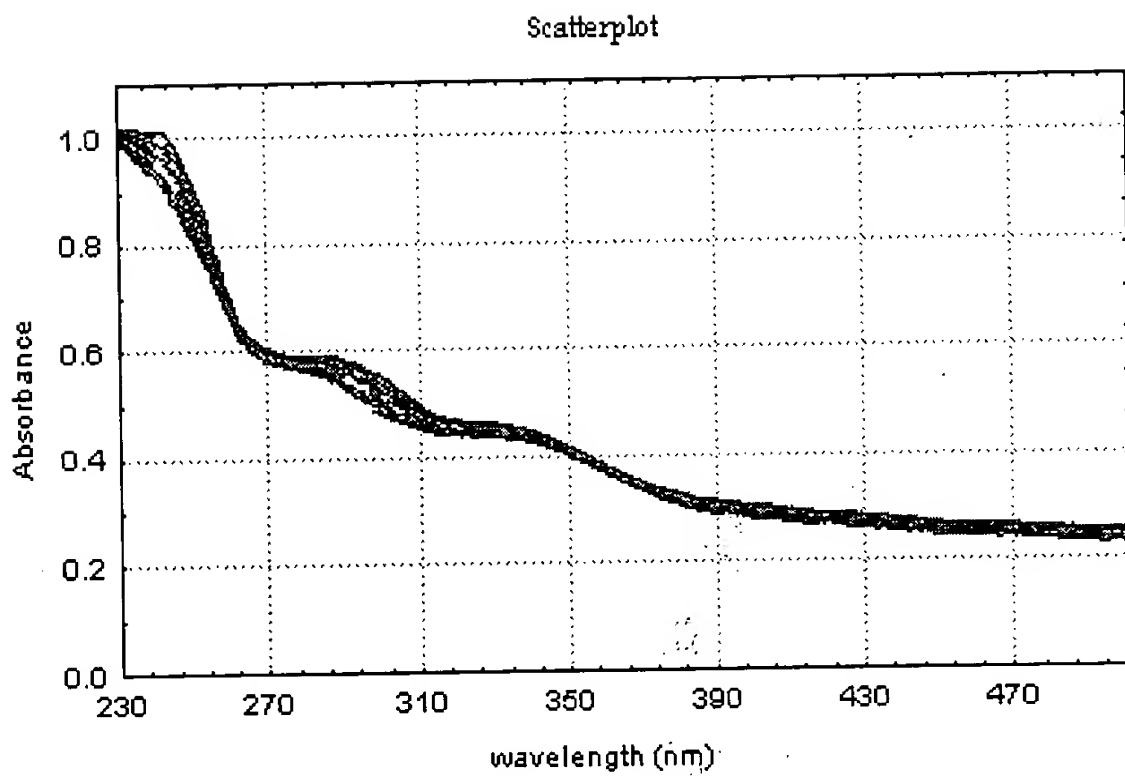


Figure 4

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Matrix Plot

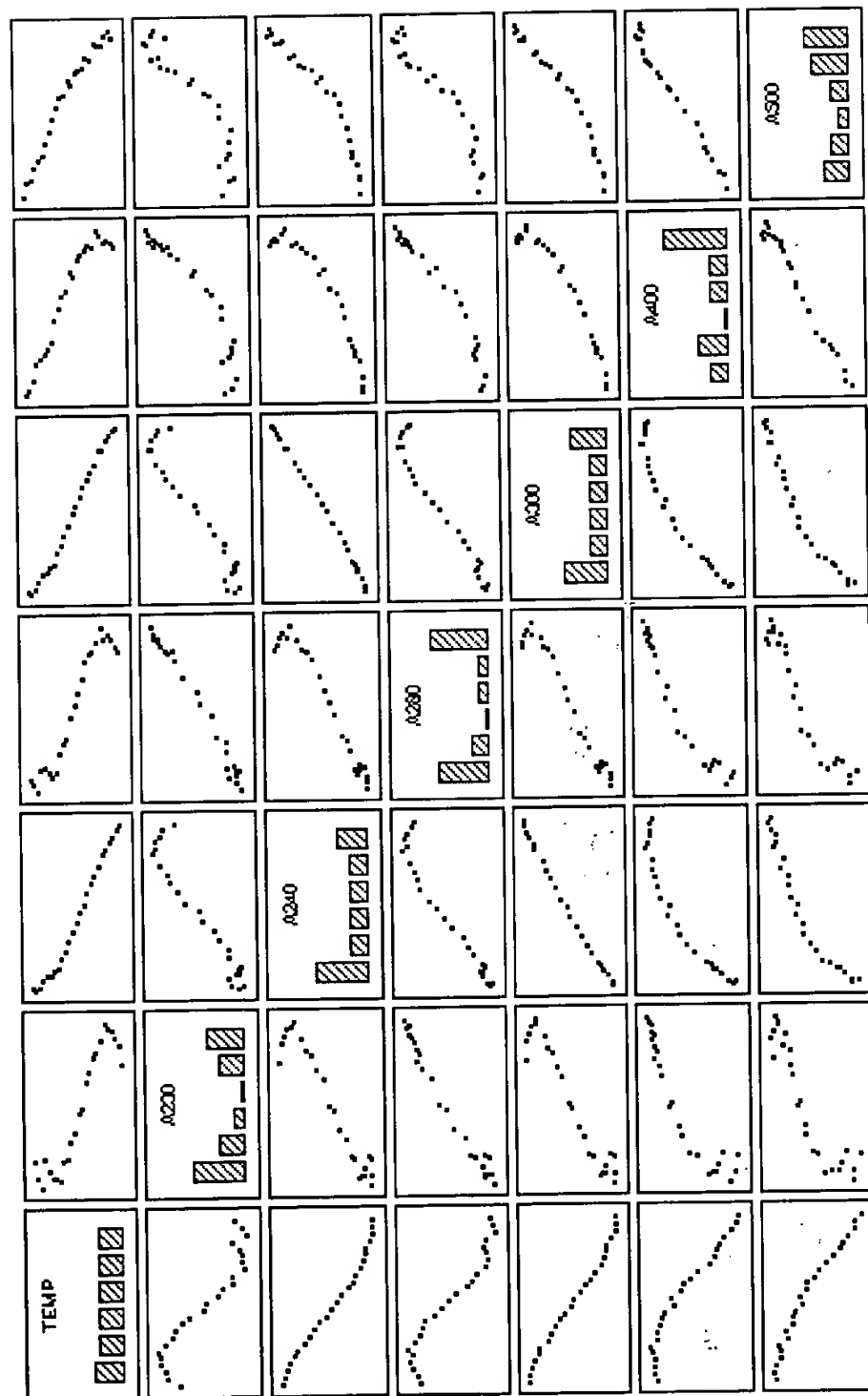


Figure 5

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Matrix Plot

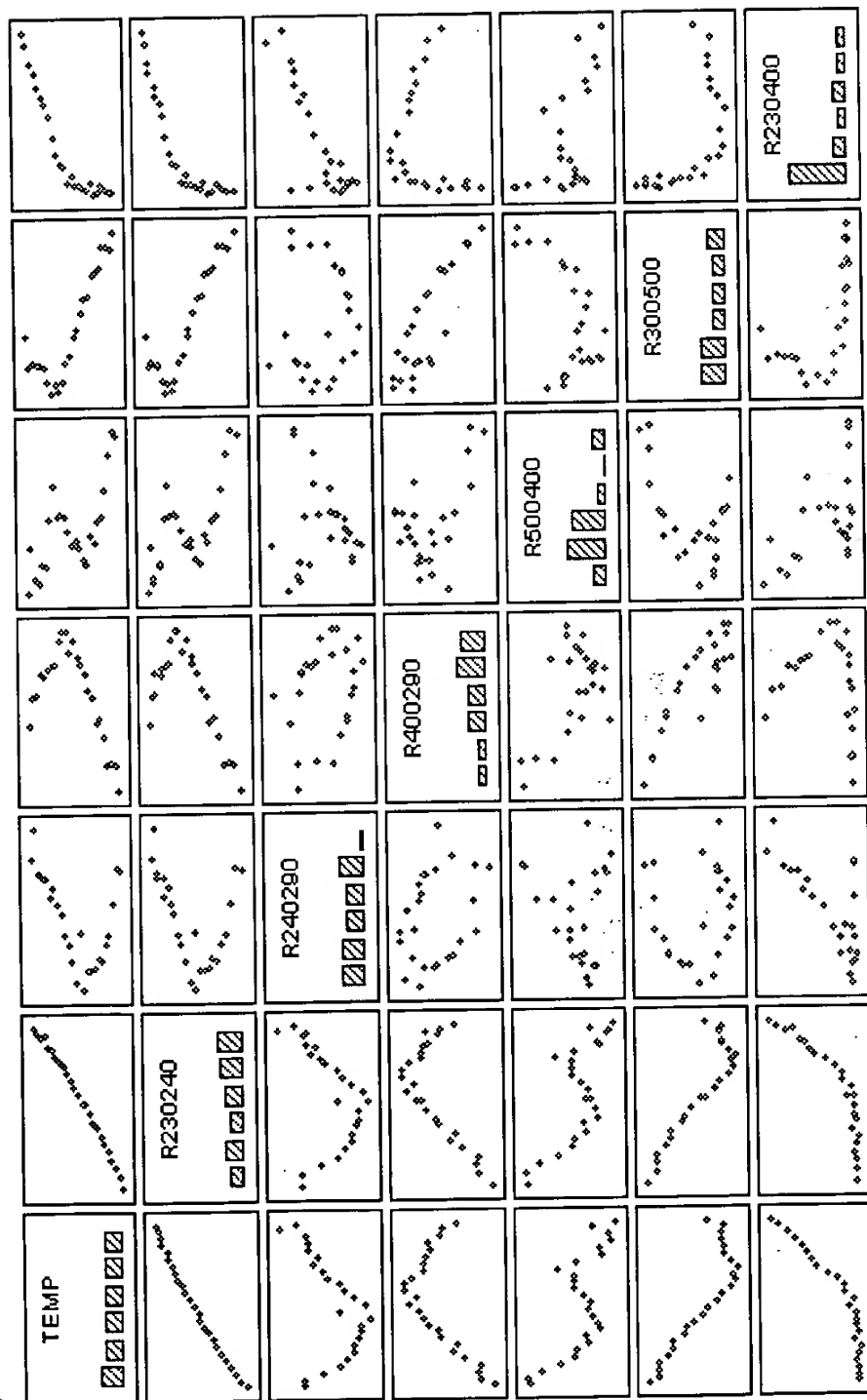


Figure 6

002020" 05466460

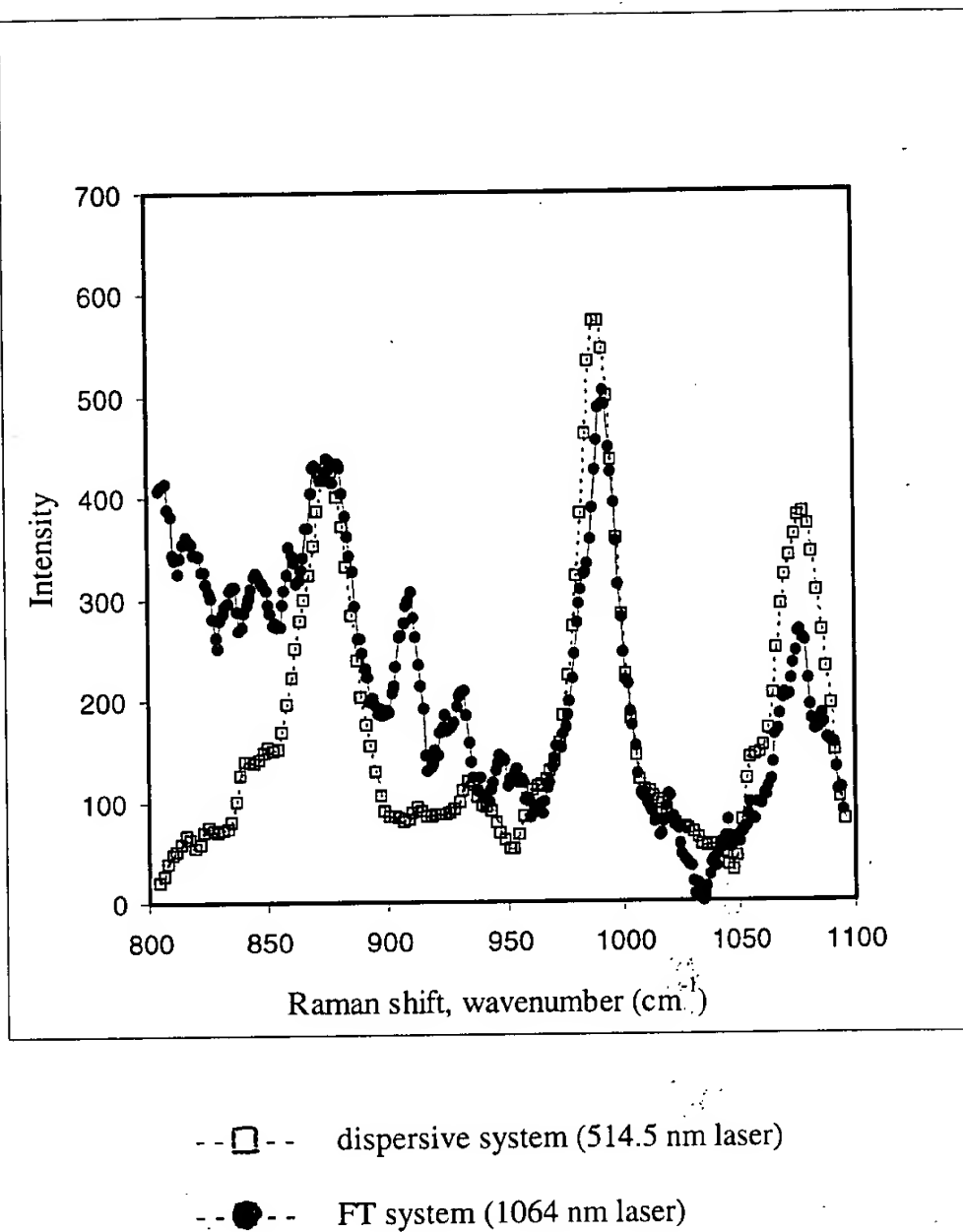


Figure 7

Water Subtraction and Baseline Correction

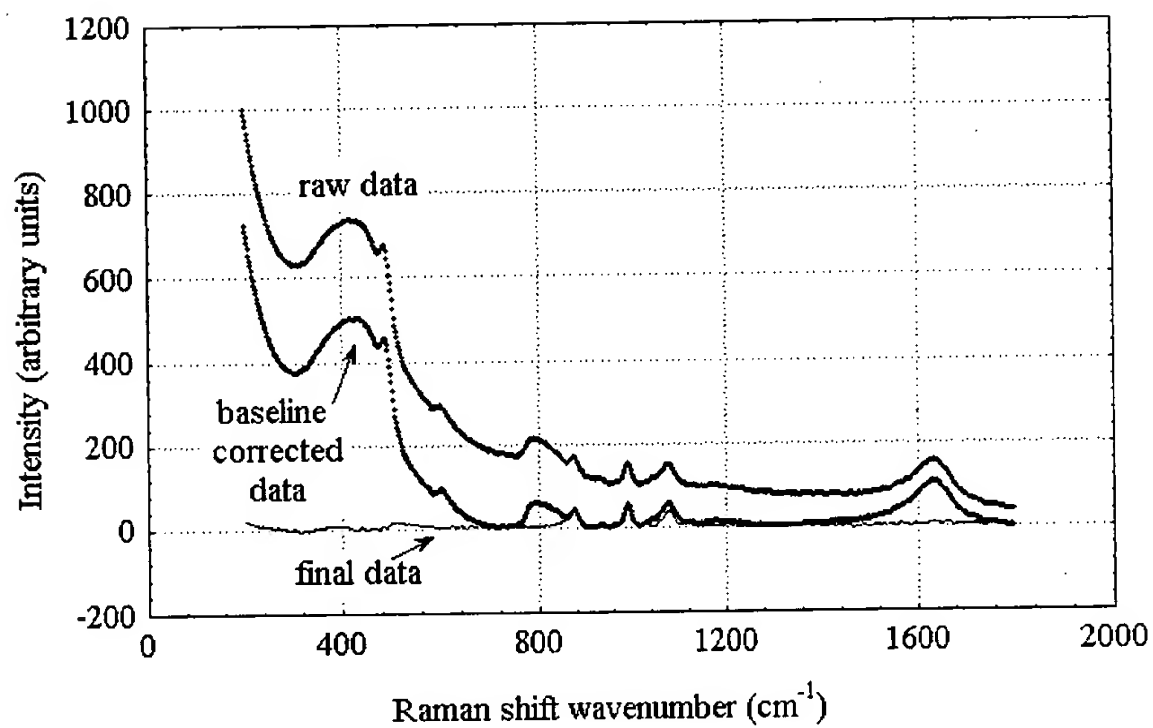


Figure 8

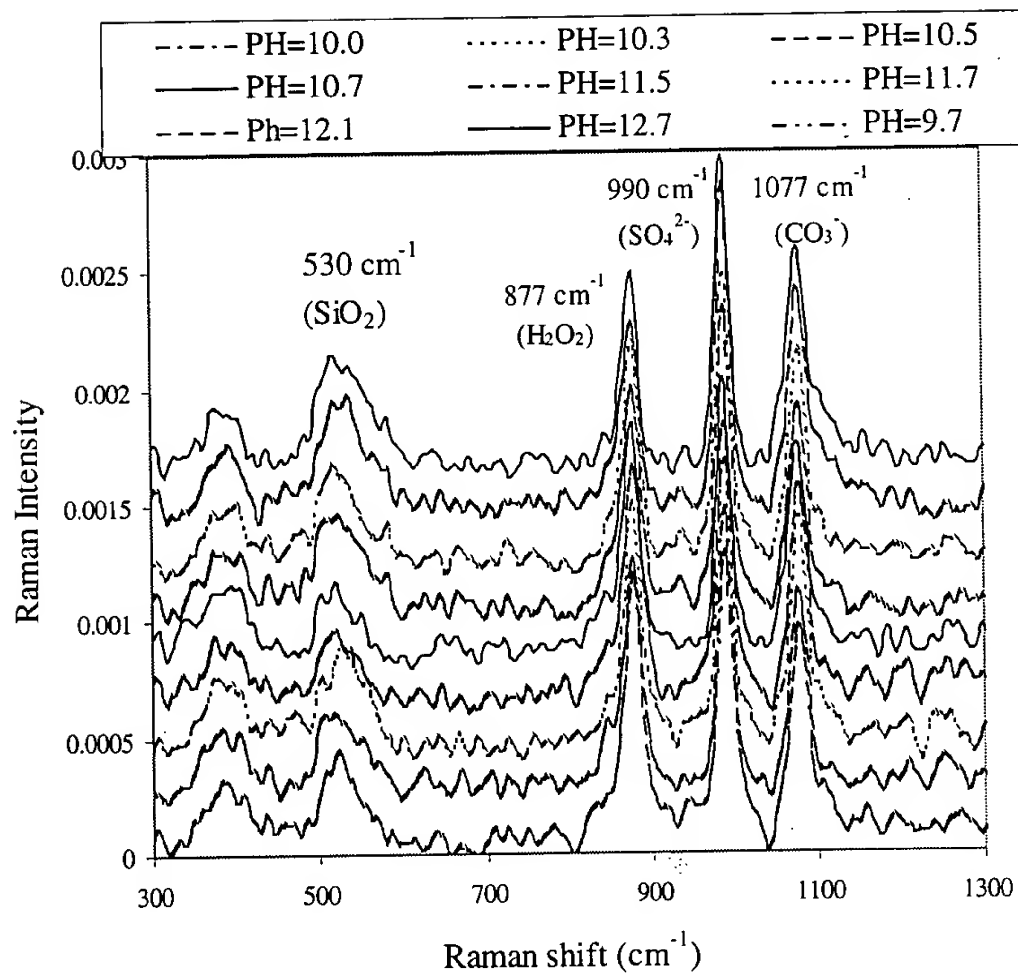


Figure 9

Matrix Plot Aspen TMP Pulp Bleaching with Hydrogen Peroxide Pulp and Bleaching Pressate Properties

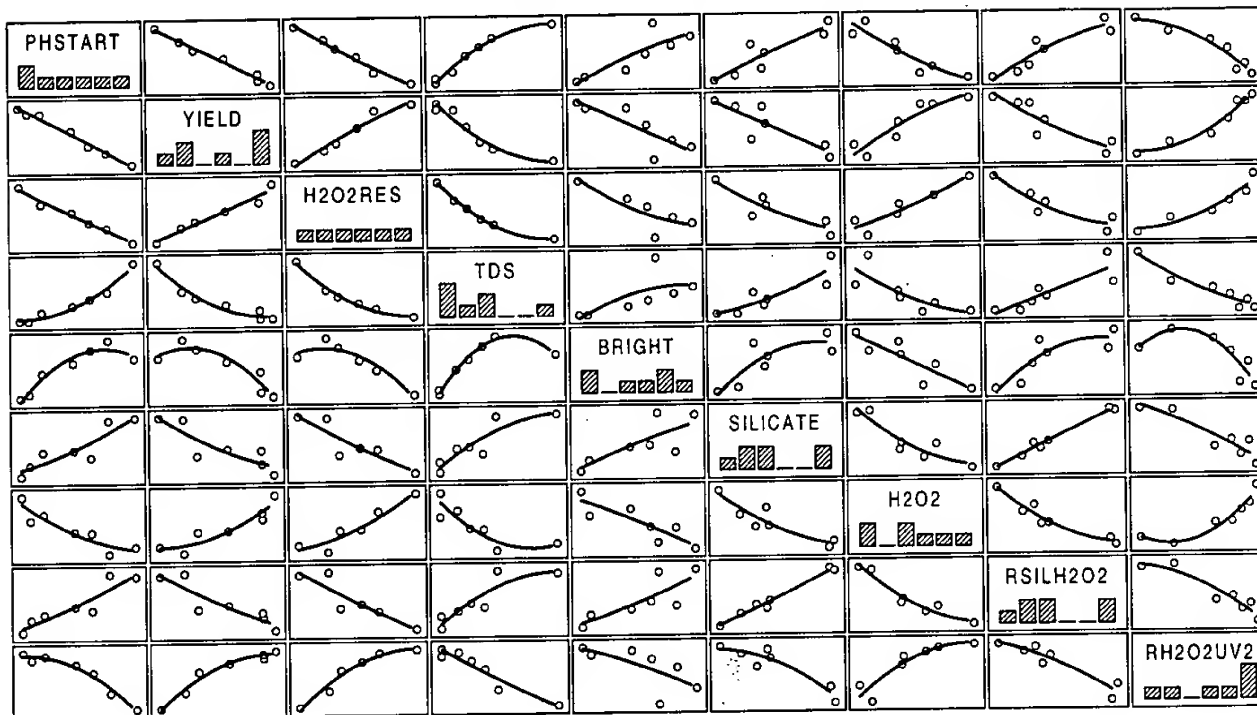


Figure 10

Raman Spectra Hydrogen Peroxide Bleaching of Aspen

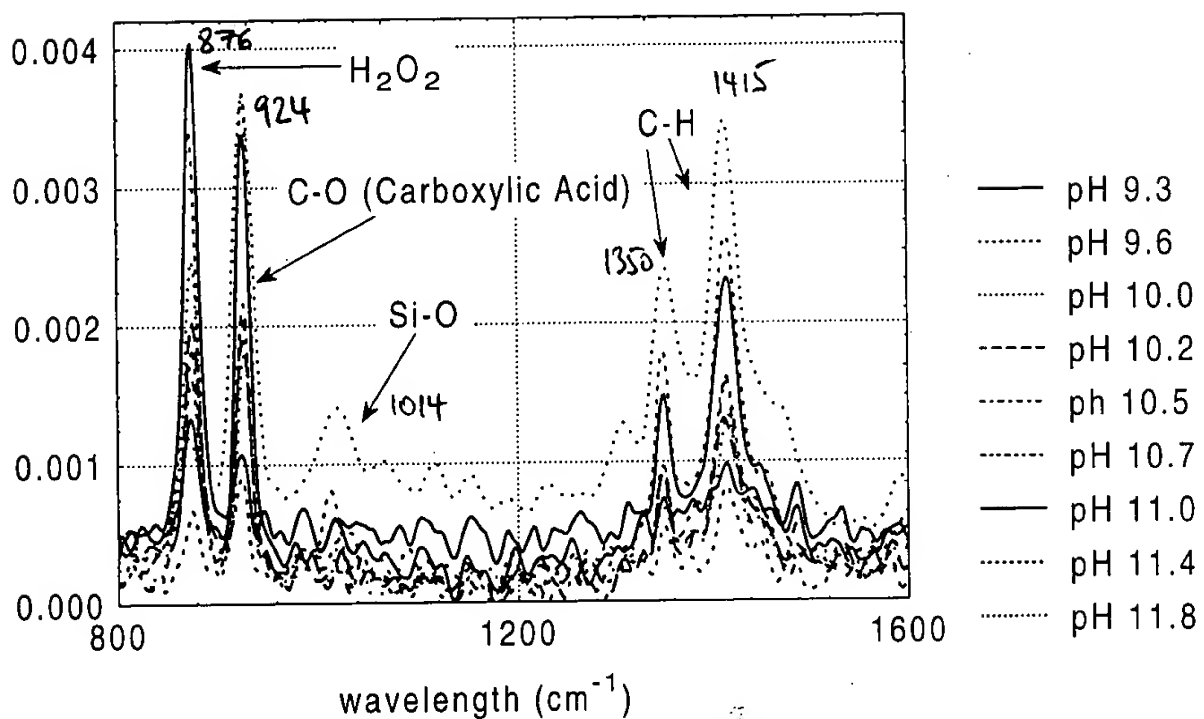


Figure 11

Predicted vs. Observed Values
Dependent variable: ISO BRIGHTNESS
Independent variables Raman intensities and intensity ratio

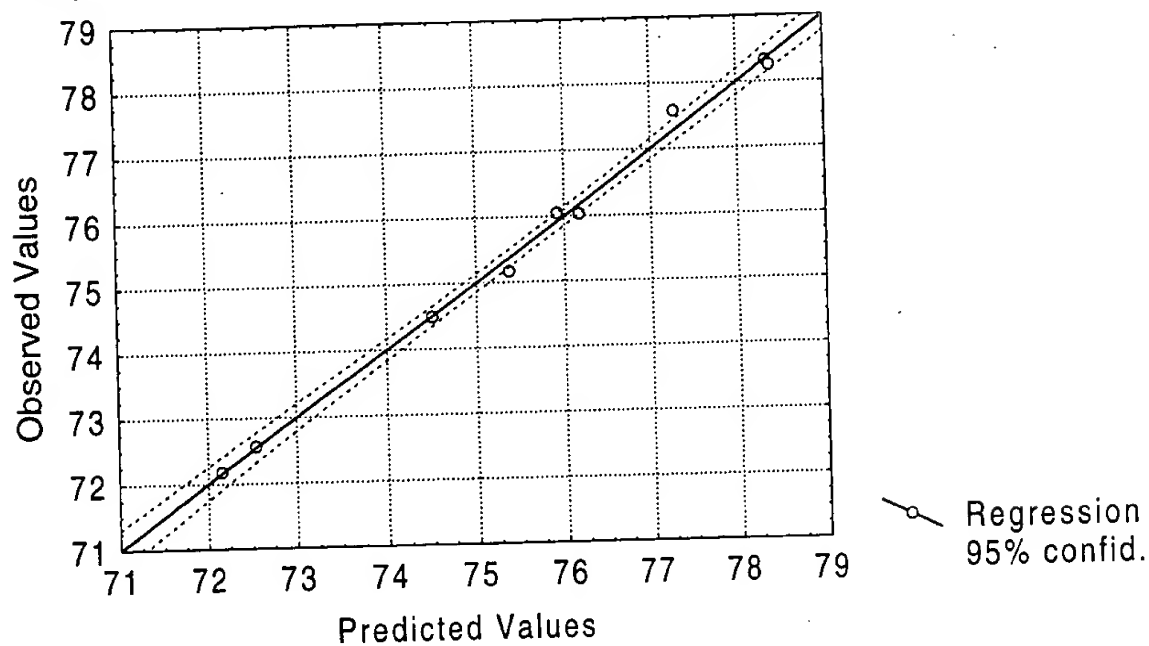


Figure 12

004020"0546460

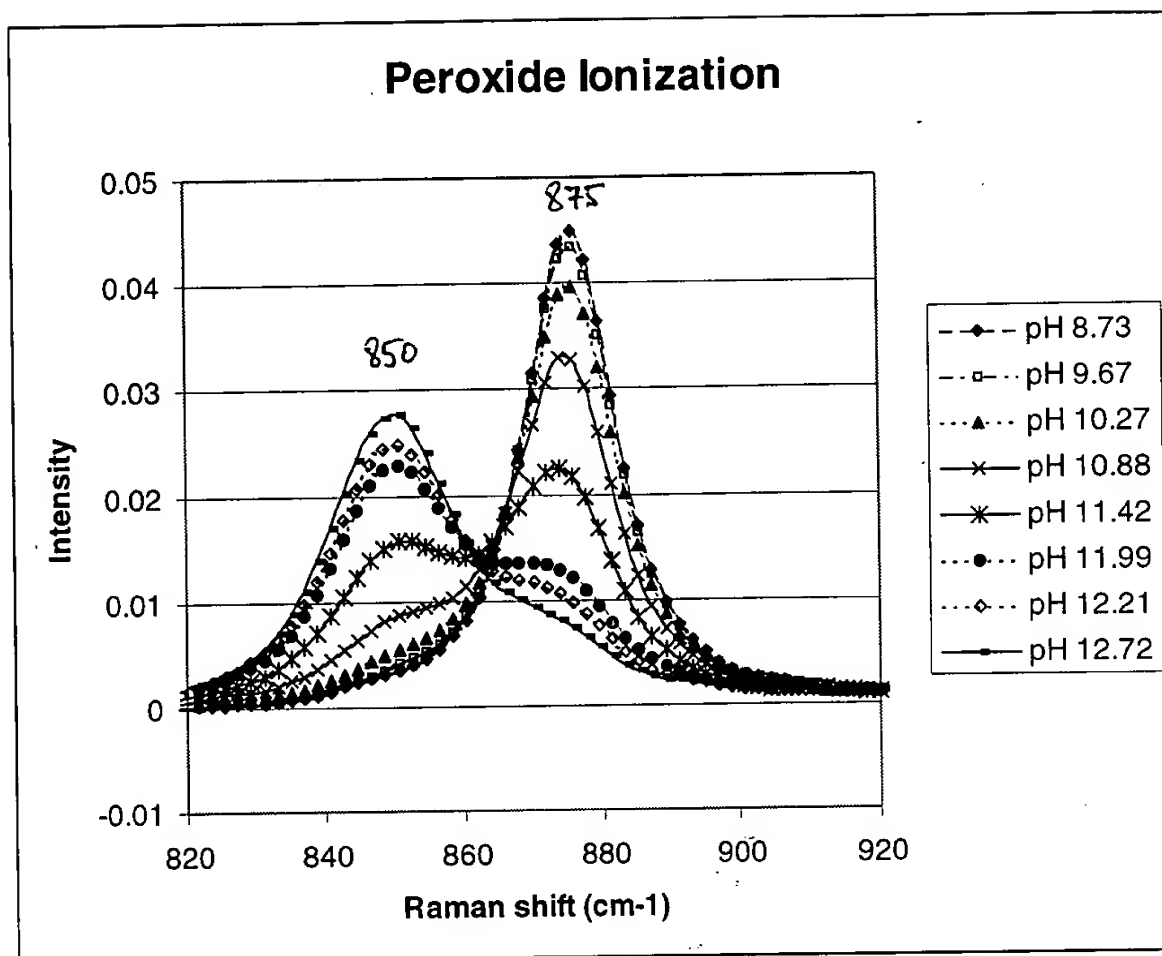


Figure 13

Matrix Plot Raman Intensity Ratios HOO- and HOOH

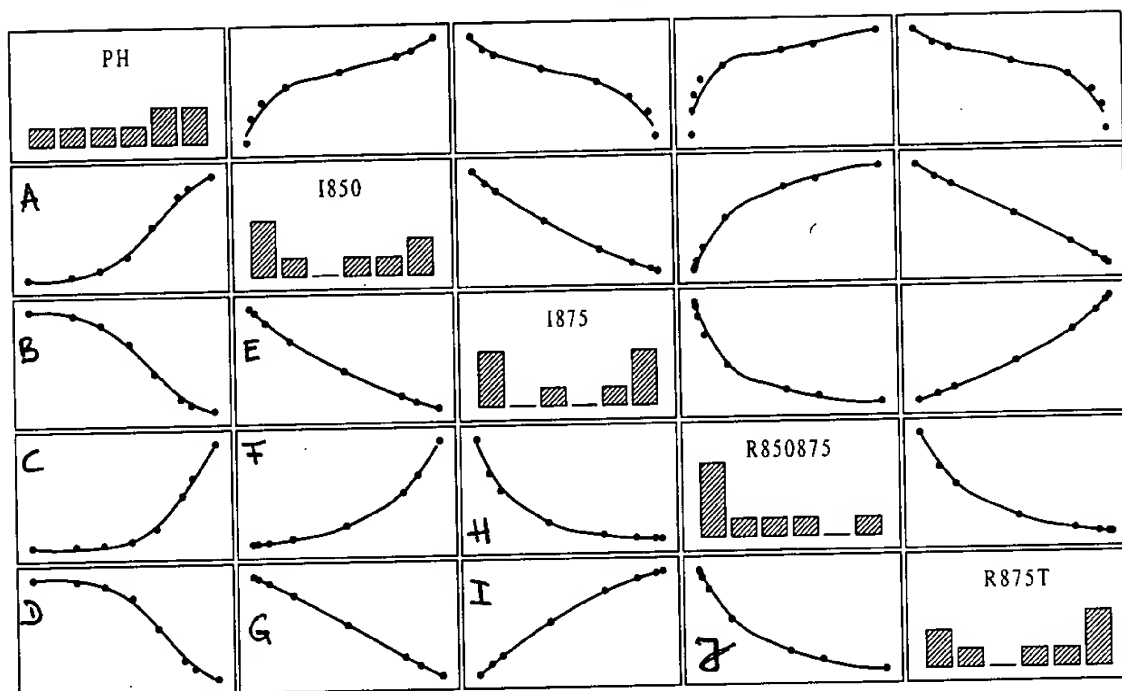


Figure 14

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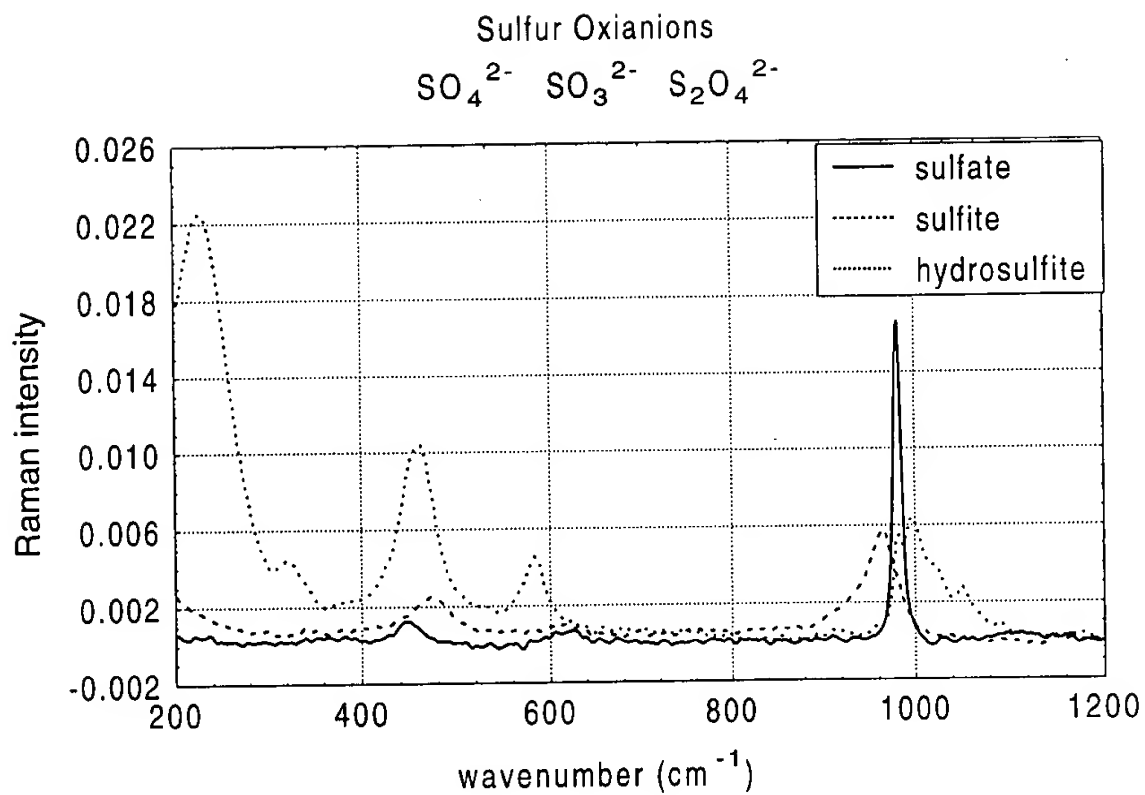


Figure 15

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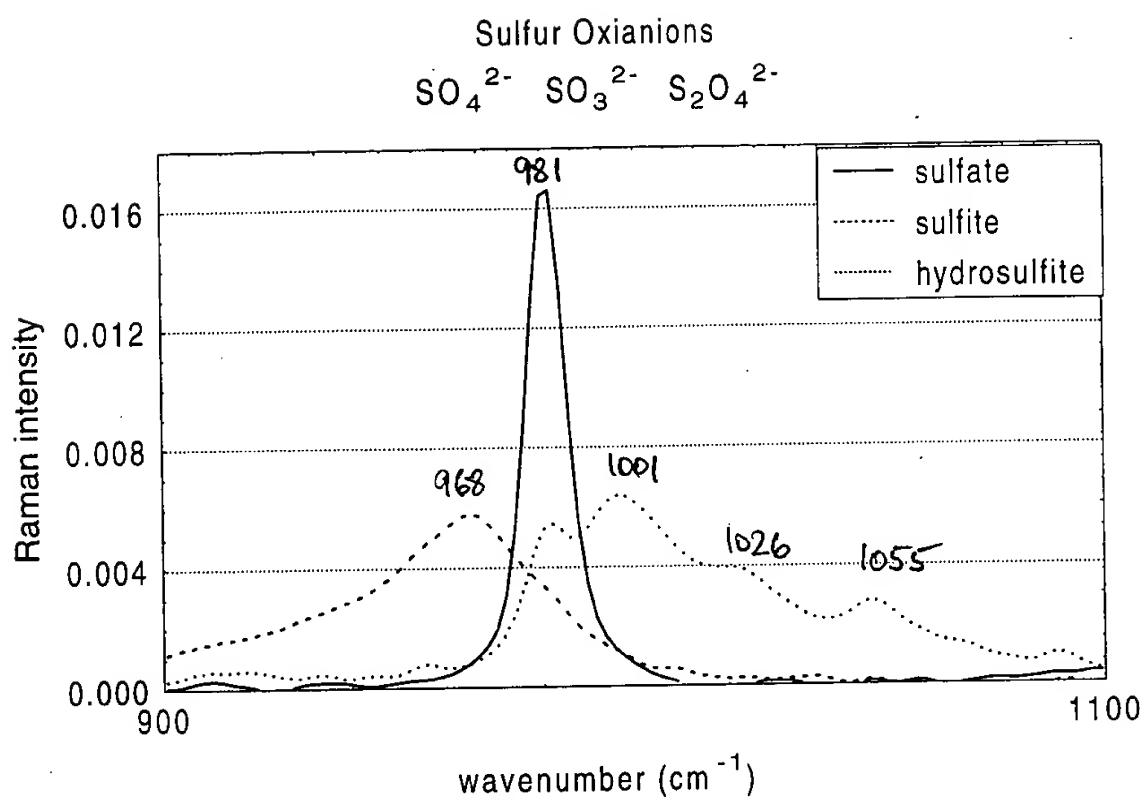


Figure 16

Raman Scattering Intensities
Hydrosulfite Oxidation

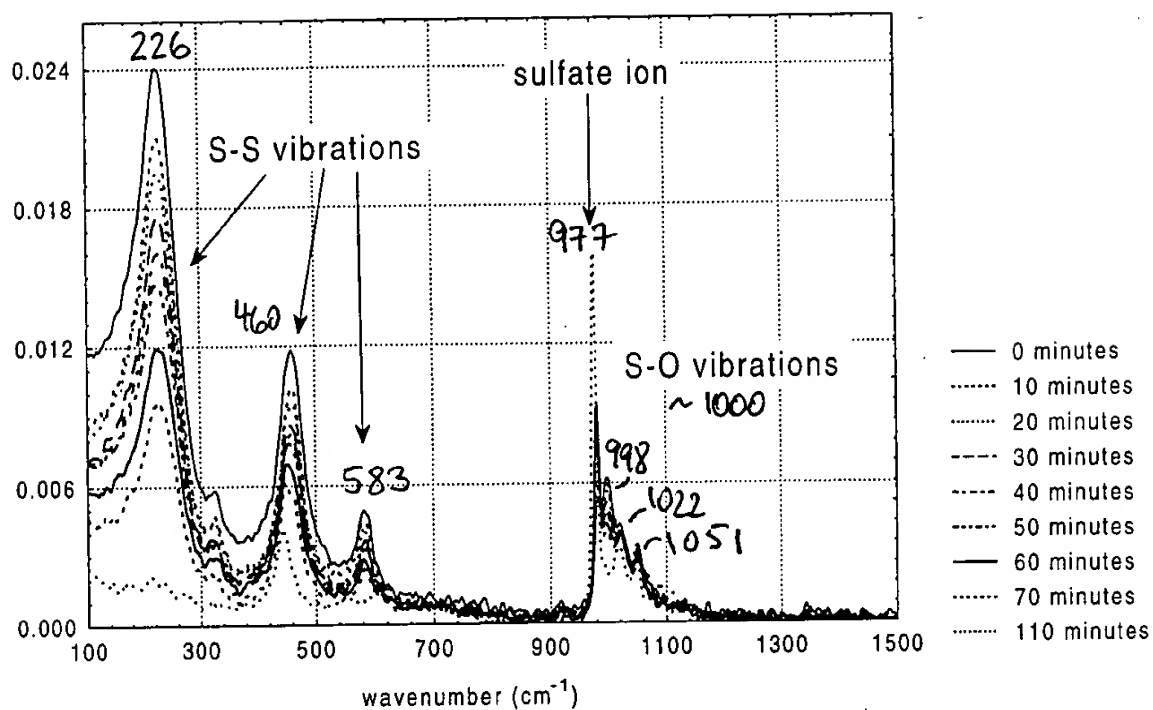


Figure 17

Raman Spectra (S-O stretch)
Hydrosulfite Oxidation

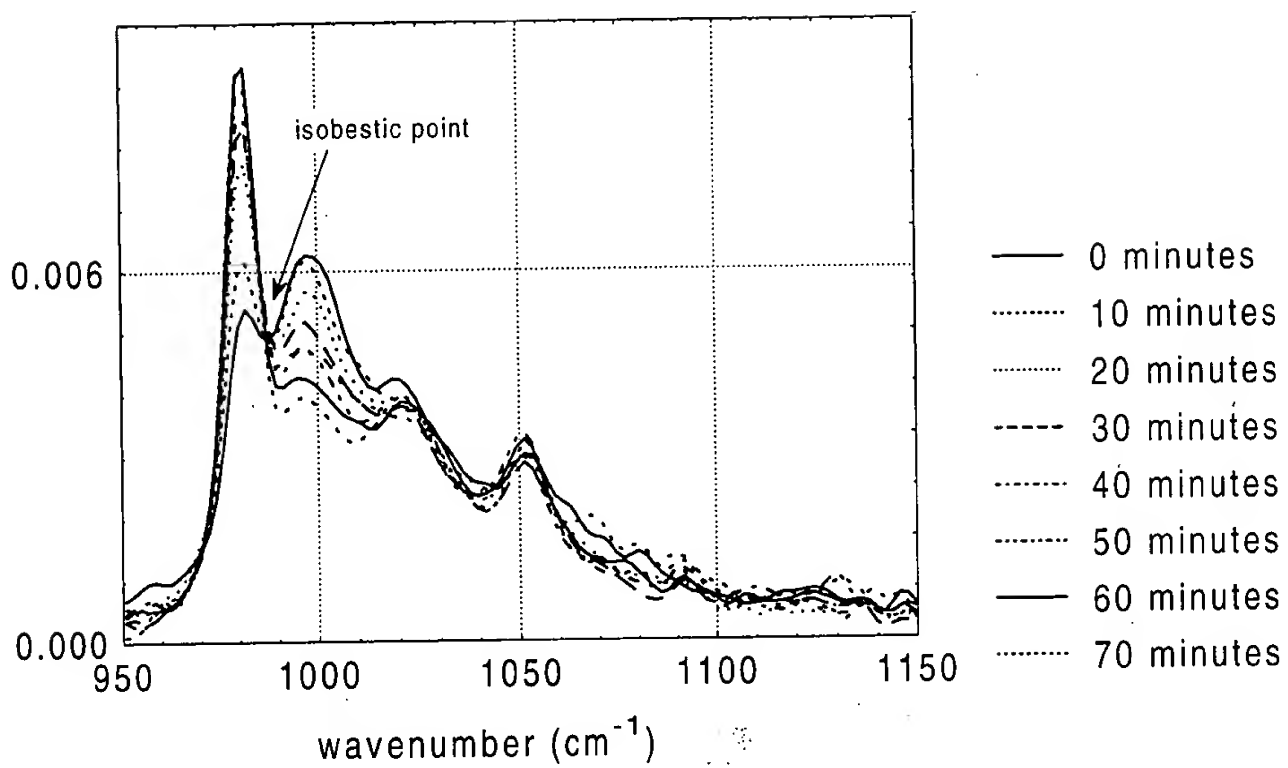


Figure 18

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Matrix Plot Hydrosulfite Oxidation Raman Intensities and Ratios with ORP

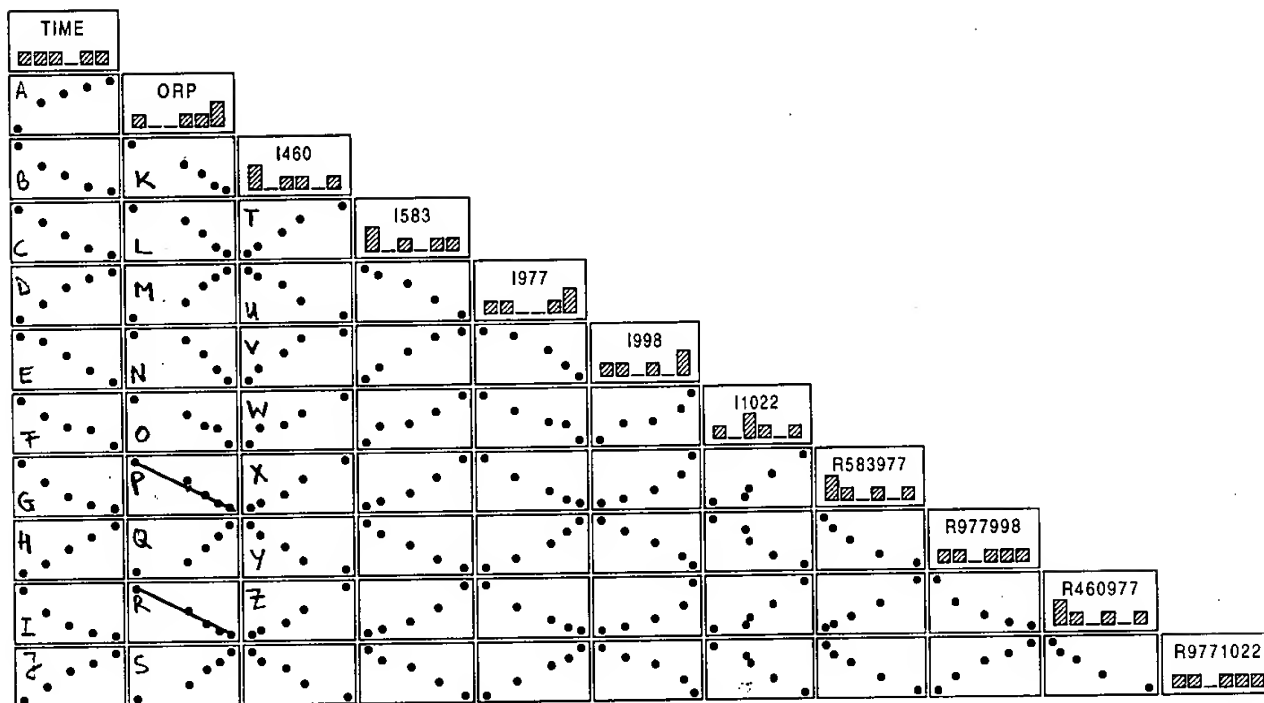


Figure 19

004020"0545460

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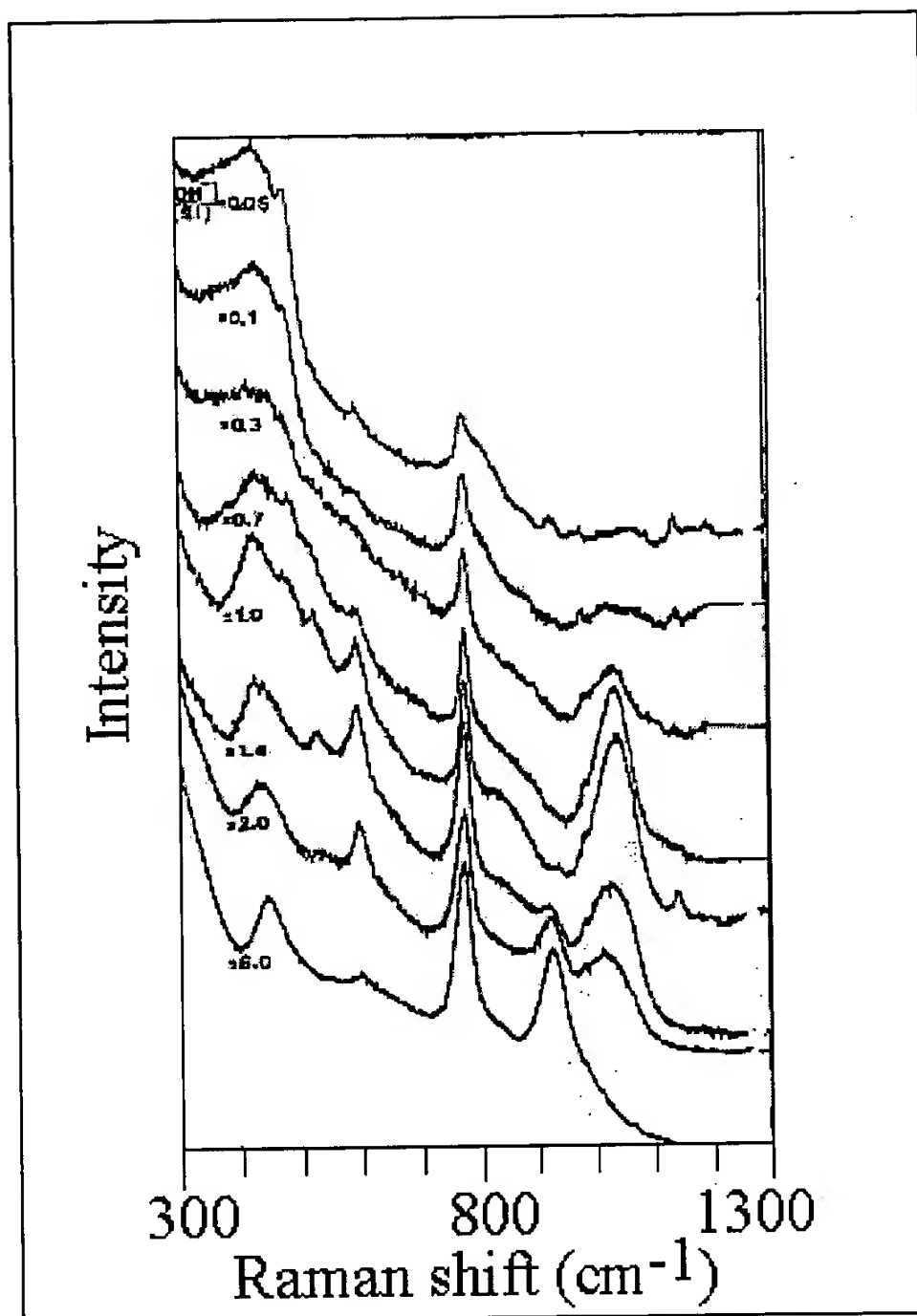


Figure 20

Matrix Plot
Raman Data
Silicate Peak Intensities vs NaOH Added

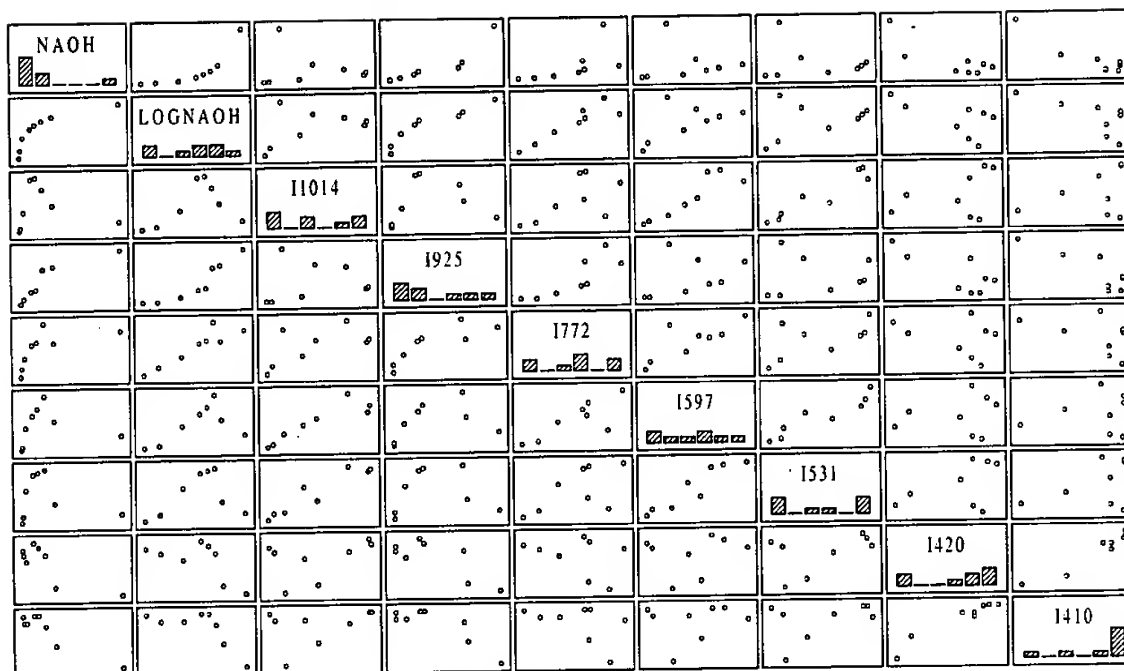


Figure 21

Matrix Plot (Raman Peak Intensities)

Silicate Data

Data Extracted From P.K. Dutta and D.-C. Sheih Applied Spectroscopy 39 (2) 343-6

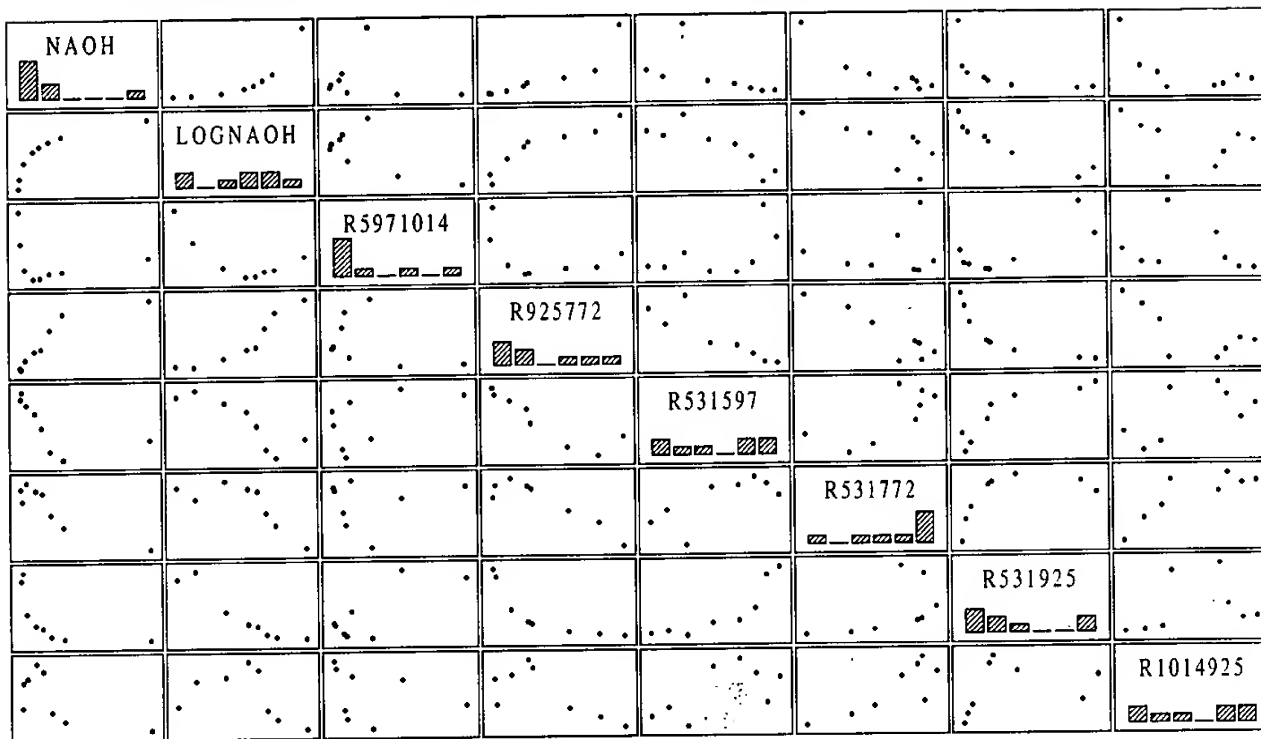


Figure 22

004020" 0545450

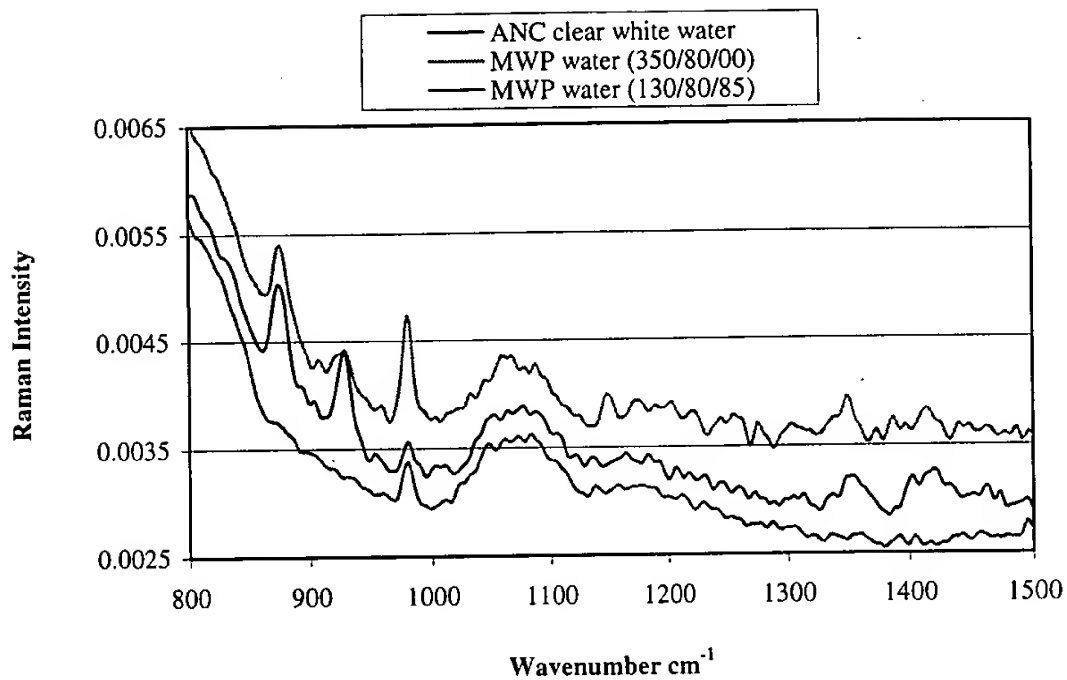


Figure 23

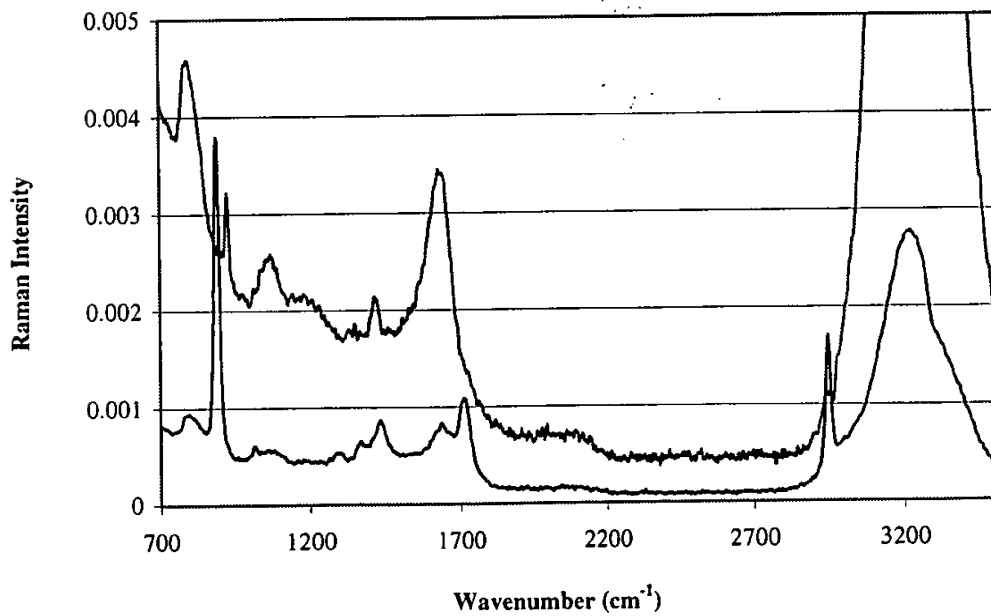


Figure 24